



DEPARTMENT OF THE NAVY  
NAVAL RESEARCH LABORATORY  
WASHINGTON, D.C. 20375

IN REPLY REFER TO:  
7500-126:JEF:gl  
19 December 1983

Dr. Joshua Lederberg  
President  
The Rockefeller University  
1230 York Avenue  
New York, NY 10021

Dear Dr. Lederberg:

Thank you for the opportunity for the Naval Research Laboratory (NRL) to provide technical inputs for your Defense Science Board (DSB) Panel on the DARPA super computer effort.

I feel that the plan is well written and of high quality and I can share DARPA's enthusiasm for this ambitious and timely program. We have studied this plan at NRL and the enclosure is a summary of our comments that were sent to DARPA. In general, you can see that our views are consistent with the DARPA plan.

Your verbal invitation to Dr. Franklin to brief your panel cannot be fulfilled owing to panel scheduling difficulties. I would like therefore to invite the DSB panel to NRL for a briefing on NRL's capabilities to assist DARPA in this important effort. I have listed below five favorable circumstances that place NRL in an excellent position to help ensure the success of the DARPA program.

- o NRL has this year received tri-service endorsement through the JDL/JLC as the military transition agent for AI and has established firm working relationships with the other services in that role.
- o NRL has, in the past two years, substantially augmented its research staff in both AI and C<sup>3</sup> system design -- the aggregate of these plus NRL's traditional strengths in software engineering and telecommunication system engineering represent the strongest military in-house capability available to assist DARPA in combat management applications.
- o NRL has coupled its accelerated investment in C<sup>2</sup> system design capability with enhanced stature in the C<sup>2</sup> acquisition community through leadership participation in the Outer Air Battle Study and battle group combat management activities in the SYSCOMs.
- o NRL continues its record for successful injection of new technology into military systems through accomplishments in the HF Improvement Program, the Advanced Narrowband Digital Voice Terminal, EHF SATCOM and other programs.

- o NRL is an accepted system engineering agent for the SYSCOMs as demonstrated by our recent designation as system engineer or lead system designer for major C<sup>3</sup> systems in NAVELEX and NAVSEA.

We have proposed to DARPA that NRL be the transition agent for the three military applications identified by DARPA's program description, and that NRL act as research performer in the battle group management and assessment application.

I look forward to an opportunity for your panel to visit NRL, perhaps in early January.

Sincerely yours,

A handwritten signature in cursive script, reading "Timothy Coffey".

T. COFFEY  
Director of Research

Enclosure (1)

Comments on DARPA Strategic Computing Plan of 28 Oct 1983